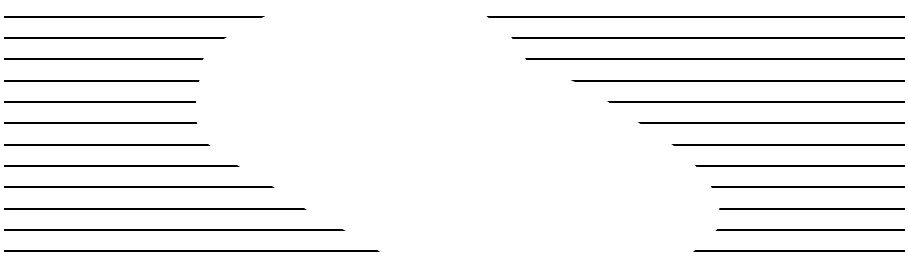
Owner's Manual

Real Voice
X•K•Ka Superwide Radar/ Laser Detector

Please read before using this equipment.



Cat. No. 22-1680

SWS safety warning system

RadioShack®

FEATURES

Your RadioShack Real Voice X•K•Ka Superwide Radar/Laser Detector can alert you to all known police traffic radar and laser systems. It receives X-, K-, and Ka-band radar signals and also detects both the instant-on and laser systems many police departments use to measure vehicle speed. Plus, your detector can give you advance warning of potential road hazards by detecting signals from transmitters that broadcast Safety Warning System™ alerts.

Your detector has many useful features, including:

Real Voice™ Audible Alerts — keep you informed while you watch the road ahead.

X-, K-, Ka-Band, and Laser Signal Detection — warns you when it detects signals from traffic radar or laser devices. Different tones sound to let you know the type of signal received.

Stay Alert — tests your awareness behind the wheel by sounding beeps and asking if you are alert.

Safety Warning System Detection — alerts you to the presence of potential road hazards and emergency vehicles signalled by a Safety Warning System transmission.

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Real Voice is a trademark of Whistler Corporation.
Safety Warning System and SWS are trademarks of Safety Warning System LLC.
InstaClear is a registered trademark used by Ford Motor Company.
ElectriClear is a registered trademark used by Libbey, Owens, Ford, and Delco-Remy.

High-Visibility Display — shows the text of 60 Safety Warning System messages.

VG-2 Protection — makes your detector invisible to the VG-2 radar-detector detector when it senses VG-2 operation.

360° Detection — detects laser signals from both the front and the rear of your vehicle.

City/Highway Modes — let you minimize alerts when you are in areas that have false radar sources.

FAST (False Alert Suppression Technology) — helps prevent false alarms caused by non-traffic radar sources.

Auto Quiet — lets you set the radar detector to give you a full-volume alert for about 5 seconds, then reduce its alert to minimum volume.

Dim/Dark Modes — let you dim the display for nighttime operation, or have the radar detector go completely dark whenever it detects traffic radar signals.

Your radar/laser detector includes the following items:

- Modular Cigarette-Lighter Plug with Straight and Coiled Cord
- Windshield Bracket with Suction Cups
- Hook and Loop Fastener
- Visor Bracket

We recommend you record your detector's serial number here. The number is on the detector's bottom panel.

Serial Number: _____

Important: Some areas have laws regulating the use of radar detectors. Check with your local law enforcement agency about the laws in your area.

One or more of the following patents apply: 4,315,261; 5,146,227; 5,379,456. Other patents pending.

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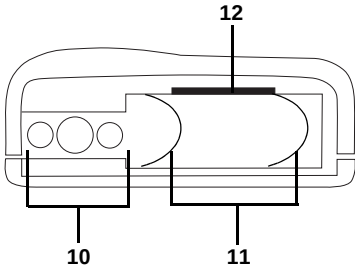
A QUICK LOOK

1. **Rear Laser Detection Lens** — receives incoming laser signals from the rear.
2. **Speaker** — sounds distinct audio and Real Voice warnings.
3. **MUTE Button —** press before a radar/laser signal is detected to reduce the level of audio alerts that sound when there is a signal. Press after a signal is detected to silence the alert, but still have visual alerts to keep you informed.
4. **CITY Button** — reduces false alerts typically encountered in urban driving areas.
5. **High Visibility LED Text Display** — provides distinct visual confirmation of signals detected and signal strength, and indicates the selected operating modes.

6. **VOL ∧/∨ Buttons —** Adjust volume up or down and turn the VG-2 option on or off.
7. **PWR (Power/Volume) Button** — turns the detector on and off and lets you engage the dim or dark setting.
8. **Power Jack** — the power cable plugs in here.
9. **Bracket Release Button** — lets you quickly remove the detector's bracket.



10. **Front Laser Detection Lens** — receives incoming laser signals from the front.
11. **Radar Detection Antenna** — receives incoming radar signals.
12. **Mounting Bracket Slot** — holds the windshield mounting bracket.

INSTALLATION

MOUNTING GUIDELINES

Follow these guidelines when selecting a location.

- Choose a location that does not block the driver's view of the road.
- Mount the detector in a level position with a clear view to both the front and rear.
- The detector's view of the road must not be blocked by any metal object.
- Some vehicles have InstaClear® or ElectriClear® defogging windshields, which have metal coatings that block signals. General Motor's APV vans have a solar shield that keeps the vehicle cooler during the summer, but also blocks signals. A detector installed in a vehicle with any of these features will probably not detect a signal.
- Since window tinting reduces the received strength of laser signals, you should not mount the detector behind any tinted glass.
- Do not mount the detector where the driver or a passenger might hit it in a sudden stop or accident.

Caution: Whichever mounting method you choose, place the detector out of view when you leave the vehicle. This keeps the detector out of sight of thieves and prevents exposing it to extremely high temperatures, which can temporarily impair performance.

HOOK-AND-LOOP TAPE MOUNTING

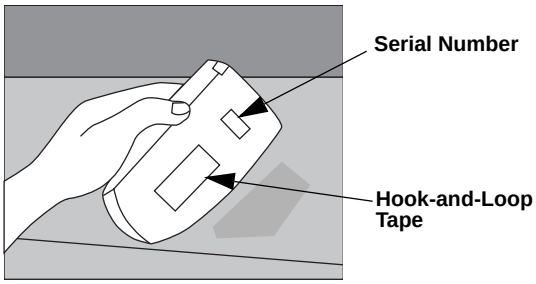
For some dashboards, the hook-and-loop tape included with your detector might be best for mounting. Follow these steps to use the hook-and-loop tape.

1. Use a damp cloth to clean the bottom of the detector and the dashboard. Let both surfaces dry.

   Note: The tape's adhesive might not stick to a surface treated with vinyl cleaner or protectant.

2. Remove the tape's backing and stick the tape to the bottom of the detector.

   Note: Do not place the hook-and-loop tape over the detector's serial number.



   On a curved dashboard, cut the supplied strip in half and use one strip on each side of the bottom of the detector.

3. Remove the backing from the other side of the tape and press the detector onto the dashboard.

WINDSHIELD MOUNTING

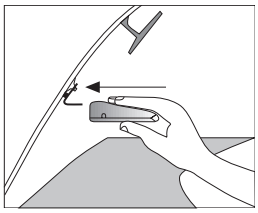
The supplied suction-cup windshield bracket lets you easily mount the detector on the windshield.

Caution: Do not use the bracket in a vehicle that has a plastic coating on the windshield designed to protect passengers during an accident. If you use the bracket on this type of windshield, you might permanently mar the windshield's surface.

1. Align the groove in each suction cup with the slots in the windshield bracket and slide the suction cups out until they lock into place.

illus of suction cup installation in windshield bracket

2. Clean the selected windshield area, position the bracket on the windshield, and press firmly on each suction cup to secure it in place.
3. Slide the detector onto the base plate until it snaps into place.



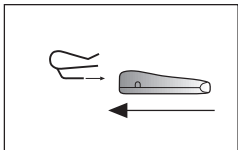
To level the detector, press the bracket release button to remove the detector from the bracket. Then bend the bracket.

illus of bracket release button location

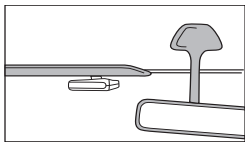
VISOR MOUNTING

The supplied visor mounting bracket lets you easily mount the detector on your vehicle's visor.

1. Slide the visor bracket's tab into the detector's bracket mounting slot.



2. Clip the visor bracket onto the visor, making sure it is relatively level and has a clear view of the road.



CONNECTING POWER

Caution:

- Use only the supplied straight or coiled power cord. If your power cord is lost or damaged, you can order a replacement cord from your local RadioShack store.
- Before plugging the power cord's cigarette-lighter plug into your vehicle's cigarette-lighter socket, make sure the plug's tip is screwed firmly onto the plug. See "Replacing the Fuse" on Page 27 for more information about the cigarette-lighter plug.
- Unplug the power cord's cigarette-lighter plug from your vehicle's cigarette-lighter socket when you turn off the ignition. This prevents your vehicle's battery from being drained if you leave the detector on when you turn off the ignition.

Plug the supplied straight or coiled power cord's smaller barrel plug into the detector's power jack. Then connect the cord's larger barrel plug to the cigarette-lighter plug's jack and insert the plug into your vehicle's cigarette-lighter socket.

Note: If the detector does not operate when you turn it on, remove the cigarette-lighter plug from your vehicle's socket and check the socket for ashes and other debris. Also check the fuse in the cigarette-lighter plug and your vehicle's fuse block (see "Replacing the Fuse" on Page 27).

OPERATION

TURNING THE DETECTOR ON AND OFF

To turn on the detector, press **PWR**.

The detector sounds a distinctive alert and displays the indicators for each alert type as a self test, in this order:

Alert Type	Voice Alert	Audible Alert	Visual Alert
X	"X-band"	Low steady	**X ▶▶▶▶▶9**
K	"K-band"	High trill	**K ▶▶▶▶▶9**
Ka	"Ka-band"	Medium warble	**Ka▶▶▶▶▶9**
Safety	None	None	**SAFETY**
Laser	None	None	**LASER▶▶▶**
VG-2	None	None	**VG-2 OFF HIGHWAY**

To turn off the detector, press the **PWR** button.

See "Receiving and Identifying Alert Signals" on Page 15 for more information about alerts.

ADJUSTING THE VOLUME

To increase the detector's volume, press **VOL** ∧. To decrease the volume, press **VOL** ∨. **VOL ▶** appears at the lowest level and **VOL ▶▶▶▶** appears at the highest.

DEMONSTRATING ALERTS

To familiarize yourself with the different alerts your detector sounds, you can run a demonstration. To start the demonstration, press and release **MUTE** and **CITY** at the same time with the detector turned on. The detector displays **TEACH**, then demonstrates the alerts for X, K, Ka, laser, VG-2, and all 60 safety warning system messages, in that order. To stop the demonstration, hold down **PWR**.

MUTING ALERTS

While a radar, laser, or safety warning alert is sounding, you can press **MUTE** to temporarily silence the detector for the current alert and any new alert that it receives within 20 seconds. Visual alerts are not affected.

USING AUTO QUIET

Auto Quiet reduces the selected audio level to a minimum level about 5 seconds after it detects a radar signal. The audio alert sounds at the minimum level for any new signal received within 20 seconds. VG-2 or laser alerts are not affected.

To turn on Auto Quiet, press **MUTE** when the detector is not sounding an alert. The detector displays **AUTO** then **QUIET**.

To turn off Auto Quiet, press **MUTE** when the detector is not sounding an alert.

SELECTING THE CITY AND HIGHWAY MODES

Your detector's CITY and CITY 1 modes are designed to reduce annoying false alerts triggered by automatic door openers, intrusion alarms, and other devices that share frequencies with police radar. In the CITY 1 mode, only X-band sensitivity is lowered.

Note: The city modes have no effect on laser or VG-2 operation.

To select the CITY mode, press **CITY** once. The detector displays **CITY**. If the detector receives a weak speed/safety radar signal in CITY mode, it beeps twice, then remains quiet unless the signal becomes very strong. If the signal strength increases, the detector again beeps twice.

To select the CITY 1 mode, press **CITY** twice. The detector displays **CITY 1**.

To cancel the city modes, press **CITY** a third time. The detector displays **HIGHWAY**. The highway mode provides maximum alert response for open-road driving.

DIMMING THE DISPLAY

To dim the display, hold down **PWR** for 2 seconds. The detector displays **DIM**, then the display dims.

To make the display black out, hold down **PWR** for 2 more seconds. The detector displays **DARK**. The display dims when it is not detecting a signal, and blacks out entirely while it is receiving a signal and for 20 seconds after the signal.

Hold down **PWR** for 2 more seconds to restore the display to full brightness.

SELECTING OPTIONS

Entering Option Select Mode allows you to personalize the tone, Real Voice, power up sequence and VG-2 mode. When selecting options, you must press ^, v, or **MENU** within 20 seconds or the detector automatically exits the option mode.

Press MENU	Display Reads	To Change, Press	Option
For 2 seconds	**TONE 3**	^ or v	Tone 1, 2, or 3 (3 different X, K, Ka patterns)
2nd time	**TEST YES**	^ = YES v = NO	X, K, Ka audio tones 1 beep during power up
3rd time	**VG2 OFF**	^ = ON v = OFF	Turns VG-2 On Turns VG-2 Off (Default)
4th time	**VOICE ON**	^ = ON v = OFF	Real Voice On Real Voice Off

Press **PWR** anytime to exit.

Notes:

- When Real Voice is on, the detector announces the band and Safety Warning System messages.
- The voice message might not always match the text message exactly.

RECEIVING AND IDENTIFYING ALERT SIGNALS

Your detector gives different audible and visual alerts for each signal. In addition, the alert tone pulse rate increases with signal strength and the detector displays a digit from 1 to 9 to indicate the signal strength (1 is weakest and 9 is strongest).

When your detector senses instant-on radar, it sounds an intense, 3-second tone and displays **PULSE**.

Safety Radar Alerts

Your radar detector detects all safety radar including the new Safety Warning System. This system provides advanced warning of hazards and lets you respond appropriately to potentially dangerous conditions.

Note: Not all areas have Safety Warning System transmitters. Your radar detector only alerts you to hazards if the area you are in has transmitters sending signals.

When your radar detector encounters safety radar, it sounds a distinctive tone and displays the signal strength. In addition, your radar detector displays **CAUTION** and informs you of the type of hazard by displaying one of 60 defined messages. When Real Voice is on, the detector announces the Safety Warning System message.

Display	Road Hazard Detected
WORK ZONE	Work Zone Ahead
ROAD CLOSED DETOUR	Road Closed Ahead/Follow Detour
BRIDGE CLOSED DETOUR	Bridge Closed Ahead/Follow Detour
HIGHWAY WORK CREWS	Highway Work Crews Ahead
UTILITY WORK CREWS	Utility Work Crews Ahead
FOLLOW DETOUR	All Traffic Follow Detour Ahead
TRUCKS FOLLOW DETOUR	All Trucks Follow Detour Ahead
EXIT AHEAD	All Traffic Exit Ahead
RIGHT LANE CLOSED	Right Lane Closed Ahead

Display	Road Hazard Detected
CENTER LANE CLOSED	Center Lane Closed Ahead
LEFT LANE CLOSED	Left Lane Closed Ahead
STANDING POLICE VEHICLE	Stationary Police Vehicle Ahead
TRAIN AT CROSSING	Train Approaching/At Crossing
LOW OVERPASS	Low Overpass Ahead
DRAW BRIDGE	Drawbridge Up
BRIDGE WEIGHT LIMIT	Observe Bridge Weight Limit
ROCK SLIDE AREA	Rock Slide Area Ahead
SCHOOL ZONE	School Zone Ahead
ROAD NARROWS	Road Narrows Ahead
SHARP CURVE	Sharp Curve Ahead
PEDEST CROSSING	Pedestrian Crossing Ahead
DEER CROSSING	Deer/Moose Crossing
BLIND DEAF CHILD	Blind/Deaf Child Area
STEEP GRADE LOW GEAR	Steep Grade Ahead/Truck Use Low Gear
ACCIDENT	Accident Ahead
POOR ROAD SURFACE	Poor Road Surface Ahead
SCHOOL BUS LOADING	School Bus Loading/Unloading
NO PASSING ZONE	No Passing Zone
DANGER INTERSEC	Dangerous Intersection Ahead

Display	Road Hazard Detected
STANDING EMERGENCY VEHICLE	Stationary Emergency Vehicle Ahead
HIGH WIND	High Wind Ahead
SEVERE WEATHER	Severe Weather Ahead
HEAVY FOG	Heavy Fog Ahead
WATER FLOODING	High Water/Flooding Ahead
ICE ON BRIDGE	Ice On Bridge Ahead
ICE ON ROAD	Ice On Road Ahead
BLOWING DUST	Blowing Dust Ahead
BLOWING SAND	Blowing Sand Ahead
BLOWING SNOW	Blowing Snow White Out Ahead
REST AREA	Rest Area Ahead
REST SERVICE AREA	Rest Area With Service Ahead
24 HOUR FUEL SERVICE	24 Hour Fuel Service Ahead
INSPECT STATION OPEN	Inspection Station Open
INSPECT STATION CLOSED	Inspection Station Closed
REDUCED SPEED AREA	Reduced Speed Area Ahead
SPEED LIMIT ENFORCED	Speed Limit Enforced
HAZARD'S MATERLS EXIT	Hazardous Materials Exit Ahead
CONGESTD TRAFFIC DELAY	Congestion Ahead/Expect Delay
EXPECT TEN MINUTE DELAY	Expect 10 Minute Delay

Display	Road Hazard Detected
EXPECT TWENTY MINUTE DELAY	Expect 20 Minute Delay
EXPECT THIRTY MINUTE DELAY	Expect 30 Minute Delay
EXPECT ONE HOUR DELAY	Expect 1 Hour Delay
TRAFFIC ALERT TUNE AM RADIO	Traffic Alert/Tune AM Radio
PAY TOLL	Pay Toll Ahead
TRUCKS EXIT RIGHT	Trucks Exit Right
TRUCKS EXIT LEFT	Trucks Exit Left
EMERGENCY VEHICLE	Emergency Vehicle in Transit
POLICE PURSUIT	Police in Pursuit
OVERSIZE VEHICLE	Oversize Vehicle in Transit
SLOW MOVING VEHICLE	Slow Moving Vehicle
CAUTION	General Warning for an Unspecified Hazard

Laser Audio/Visual Alerts

When your radar detector detects a laser signal from ahead or behind, the laser audio sounds and the radar detector displays **LASER ▶▶▶** for as long as the signal is present (for a minimum of 3 seconds).

Any laser alert, regardless of duration, requires immediate action! If you are the targeted vehicle, a laser gun can often determine your speed within seconds after you receive an alert. However, if you are traveling near or behind the targeted vehicle and receive an alert, you should have time to respond.

USING STAY ALERT

Stay Alert helps you test your alertness behind the wheel by sounding beeps and asking if you are alert.

Warning: Stay Alert is not intended as a substitute for adequate rest. You should not operate a motor vehicle if you are drowsy. During extended periods of vehicle operation, you should take frequent breaks. Improper reliance on the Stay Alert feature might result in vehicle damage, personal injury, or death. ***Never operate a vehicle if you are drowsy.***

1. Hold down **CITY** for 2 seconds. The detector displays **RU ALERT**, then sounds a tone.
2. When the detector sounds a tone, press **VOL ∧ or ∨**, **CITY**, or **MUTE** within 3–5 seconds.

   If you press **VOL ∧ or ∨**, **CITY**, or **MUTE** within 3–5 seconds, the detector rings again every 30–60 seconds.

   If you do not press a button within 3–5 seconds, an alarm sounds and the detector displays **GET REST**.
3. To turn off Stay Alert, turn off the detector.

RESETTING THE DETECTOR

The detector keeps the audio level, city/highway mode, mute mode, dim mode, auto quiet mode, VG-2 option, and on or off setting in memory when power is removed. When you reapply power, it returns to these same settings.

To reset the detector to its factory default settings, unplug the detector's power cord from the cigarette-lighter socket, hold down **PWR** and **MUTE**, plug in the power cord, wait for it to beep, then release **PWR** and **MUTE**. The detector turns off the auto quiet, dim, and VG-2 option, returns to highway mode, and sets the volume to its maximum level.

TROUBLESHOOTING

If you have problems operating your radar/laser detector, the suggestions in this section might help. If you cannot solve the problem after trying these suggestions, take your detector to your local RadioShack store for assistance.

If the detector does not turn on:

- Be sure all power connections are secure.
- Check the fuse that controls power to the cigarette-lighter socket. See your vehicle's owner's manual.
- Check the fuse in the cigarette-lighter plug. See "Replacing the Fuse" on Page 23.
- The cigarette-lighter socket might be dirty. Clean it to give a good, clean connection.

  Caution: Do not place any metal object other than the cigarette lighter or a cigarette-lighter plug in the cigarette-lighter socket. Doing so could blow a fuse in your vehicle or cause the metal object to become very hot.

If the detector gives a false alert when the vehicle hits bumps in the road:

- Check the power connections.

If the detector gives a false alert when you use accessories such as power windows, motorized mirrors, brakes, and so on:

- Check the vehicle's electrical system, including the main battery cable and alternator connections.
- Install a filter capacitor (1,000 μf, 35 volts, such as Cat. No. 272-1032) on the back of the cigarette-lighter socket, across the power connections.

If the detector performs the power on self-test (see "Turning the Detector On and Off" on Page 12), but does not respond to radar signals when you see a police car:

- A police car might not be equipped with radar, or might be using instant-on radar and not have the radar gun triggered (see the separate booklet *Questions and Answers About Vehicle Speed Detection*).
- Police might be using VASCAR-type speed detection (see the separate booklet *Questions and Answers About Vehicle Speed Detection*).

If the detector has poor laser detection range:

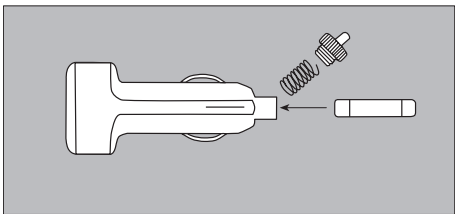
- Be sure the laser detection lenses are not blocked.
- Use lens-cleaning solution to clean the laser detection lenses and the windshield.

REPLACING THE FUSE

If the detector stops operating, check the fuse in the DC power cord's cigarette-lighter plug. If it has blown, follow these steps to replace it with a 2-Amp, $1^1/_4 \times {}^1/_4$ mm, fast-acting fuse (Cat. No. 270-1007).

Caution: Using a fuse that does not meet these ratings or defeating the fuse protection can damage your detector or the vehicle's electrical system.

1. Carefully unscrew the tip of the cigarette-lighter plug.



2. Remove the tip from the cigarette-lighter plug, then remove the old fuse.

   Note: Take care not to lose the spring inside the holder or the metal ring.

3. Replace the fuse.

4. Press the cigarette-lighter plug's tip down into the body, then screw it back in.

   Caution: Be sure you press the cigarette-lighter plug's tip down before screwing it in, or you might damage the plug.

Limited One-Year Warranty

This product is warranted by RadioShack against manufacturing defects in material and workmanship under normal use for one (1) year from the date of purchase from RadioShack company-owned stores and authorized RadioShack franchisees and dealers. EXCEPT AS PROVIDED HEREIN, RadioShack MAKES NO EXPRESS WARRANTIES AND ANY IMPLIED WARRANTIES, INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED IN DURATION TO THE DURATION OF THE WRITTEN LIMITED WARRANTIES CONTAINED HEREIN. EXCEPT AS PROVIDED HEREIN, RadioShack SHALL HAVE NO LIABILITY OR RESPONSIBILITY TO CUSTOMER OR ANY OTHER PERSON OR ENTITY WITH RESPECT TO ANY LIABILITY, LOSS OR DAMAGE CAUSED DIRECTLY OR INDIRECTLY BY USE OR PERFORMANCE OF THE PRODUCT OR ARISING OUT OF ANY BREACH OF THIS WARRANTY, INCLUDING, BUT NOT LIMITED TO, ANY DAMAGES RESULTING FROM INCONVENIENCE, LOSS OF TIME, DATA, PROPERTY, REVENUE, OR PROFIT OR ANY INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, EVEN IF RadioShack HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

Some states do not allow the limitations on how long an implied warranty lasts or the exclusion of incidental or consequential damages, so the above limitations or exclusions may not apply to you.

In the event of a product defect during the warranty period, take the product and the RadioShack sales receipt as proof of purchase date to any RadioShack store. RadioShack will, at its option, unless otherwise provided by law: (a) correct the defect by product repair without charge for parts and labor; (b) replace the product with one of the same or similar design; or (c) refund the purchase price. All replaced parts and products, and products on which a refund is made, become the property of RadioShack. New or reconditioned parts and products may be used in the performance of warranty service. Repaired or replaced parts and products are warranted for the remainder of the original warranty period. You will be charged for repair or replacement of the product made after the expiration of the warranty period.

This warranty does not cover: (a) damage or failure caused by or attributable to acts of God, abuse, accident, misuse, improper or abnormal usage, failure to follow instructions, improper installation or maintenance, alteration, lightning or other incidence of excess voltage or current; (b) any repairs other than those provided by a RadioShack Authorized Service Facility; (c) consumables such as fuses or batteries; (d) cosmetic damage; (e) transportation, shipping or insurance costs; or (f) costs of product removal, installation, set-up service adjustment or reinstallation.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

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